

REMARKS

An interview was conducted on 05/30/2006, with Examiner Mr. Kevin Bates regarding the Office Action dated 01/05/2006. Applicants are appreciative of the opportunity for an interview and the professional and courteous manner in which the interview was conducted. This is in response to the above-mentioned Office Action and further in view the interview of 05/30/2006. Reconsideration of this application is respectfully requested in view of this response/amendment.

STATUS OF CLAIMS

Claims 1, 2, 5-14, 16, and 17 are pending.

Claims 3-4 and 15 are cancelled.

Claims 1, 8-14, and 16-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai).

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unparentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai) as applied to claims 1, 8-14, and 16-17 above, and further in view of U.S. 5,809,012 (Takase).

Claims 5-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai) as applied to claims 1, 8-14, and 16-17 above, and further in view of U.S. 5,337,313 (Bucholz).

OVERVIEW OF CLAIMED INVENTION

The presently claimed invention provides for a SONET/SDH transmission device connected at a node of a synchronous network of a ring configuration for controlling inter-communication between a plurality of LAN segments, comprising a LAN interface including: a LAN interface accommodation portion for accommodating LAN segments, a traffic monitor for monitoring traffic of LAN data, which is transmitted from a node to another node of the synchronous network, a frame converter for converting a frame format to pass the LAN data through the synchronous network, a path selector for switching a transmission path for the LAN data to either a fixed band side or a shared band side according to the traffic of LAN data monitored by the traffic monitor, and a packet switch controller for discriminating packeted LAN data to be directed to a local node or not, and if the packeted LAN data is for another node, switching to transfer to the packeted LAN data to the other node, a multiplex/demultiplex part for multiplexing/demultiplexing the packeted LAN data from the LAN interface to a payload of a data frame in a logical path between a high speed SONET/SDH interface and a low speed SONET/SDH interface; and a SONET/SDH interface connected to the multiplex/demultiplex part having a high speed interfacing function for connecting the SONET/SDH transmission device to the synchronous network of ring configuration.

The present invention also provides for an inter-LAN communication system which performs inter-communication between a plurality of LAN segments connected in a ring configuration, comprising: a synchronous network in a SONET/SDH system of a ring configuration, an inter-LAN communication device which is installed in each one of a plurality of nodes of said synchronous network, and a LAN segment which is connected to said inter-LAN

communication device, wherein said inter-LAN communication device further comprises: a LAN interface accommodating portion for accommodating said LAN segment, a traffic monitor for monitoring traffic of LAN data, which is transmitted from a node to another node of the synchronous network, a frame converter for converting a frame format to pass the LAN data through the synchronous network, a path selector for switching a transmission path for the LAN data to either a fixed band side or a shared band side according to the traffic of the LAN data monitored by the traffic monitor, and a packet switch controller for discriminating packeted LAN data to be directed to a local node or not, and if the packeted LAN data is for another node, switching to transfer the packeted LAN data to the other node.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1, 8-14, and 16-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai). To be properly rejected under 35 U.S.C. §103(a), and every element of the claims must be addressed through known prior art or be recognized as an obvious variation thereof. Applicant contends that the above mentioned specific combination of Hayward and Beshai fails to provide many of the features of Applicant's pending claims.

Hayward provides for a method and apparatus for routing data packets via SONET from devices connected to a local area network to devices connected to another local area networks. Hayward's method primarily deal with picking the shortest path to a destination address in a bidirectional ring network.

Applicant agrees with the Examiner's statement on page 3 of the Office Action of 01/05/2006 that "Hayward does not explicitly indicate a traffic monitor for monitoring traffic of LAN data which is transmitted from a node to another of the synchronous network." However, Applicant respectfully disagrees that such a feature is remedied, as the Examiner contends, by Beshai.

Beshai teaches control of a multi-class digital network that supports a plurality of digital services using dynamically-configured service bands to support various transport modes and quality of service bands.

The Examiner cites column 5, lines 53-60 of Beshai as teaching the "traffic monitor" feature of Applicant's independent Claim 1 and 17. For aiding the Examiner, the citation is reproduced below:

"As shown in FIG. 1, the network control element 26 therefore *receives traffic measurement data from the node control elements 28*. The traffic measurement data is transferred to the network control element 26 through the network. The traffic measurement data is accumulated in appropriate tables and periodically analyzed in order to determine appropriate sizes for the links 24 in the network."
(emphasis added)

Applicant respectfully directs the attention of the Examiner to FIG. 1 of Beshai as referenced by the above-citation. Beshai's Figure 1 shows a network control element 26 and a separate node control element 28. Further, by Beshai's own admission, the "network control element 26 [therefore] receives traffic measurement data from the node control elements". Applicant's independent claim 1, by stark contrast, recites "a LAN interface including...a traffic monitor for monitoring traffic of LAN data" (emphasis added). Even for argument sake, if an assumption was made that Beshai's network control element 26 equates to Applicant's LAN interface of claim 1, it is clear by Beshai's own admission that the network control element 26 does NOT include an element to monitor traffic (as it receives the traffic measurement data from external elements). Absent such a showing, Applicant respectfully contends that the combination of Hayward and Beshai does not provide for each and every element of Applicant's independent claim 1.

Further, Applicant respectfully direct the Examiner's attention to column 7, lines 19-34, which outlines the data measured by control elements 28 as: (1) the transaction format (STM, ATM, IP, etc.); (2) the method of transacting processing, connection-oriented or connectionless; and (3) the method of flow control (open-loop or closed-loop).

Applicant's independent claim 17 also states that the "inter-LAN communication device further comprises ... a traffic monitor for monitoring traffic of LAN data" (emphasis added). As above, even if an assumption was made that Beshai's network control element 26 equates to Applicant's inter-LAN communication device of claim 17, it is clear by Beshai's own admission that the network control element 26 does NOT include an element to monitor traffic (as it

receives the traffic measurement data from external elements). Absent such a showing, Applicant respectfully contends that the combination of Hayward and Beshai does not provide for each and every element of Applicant's independent claim 17.

With respect to independent claims 1 and 17, Applicant agrees with the Examiner's statement on page 3 of the Office Action of 05/01/2006 that "Hayward does not explicitly indicate "a path selector for switching a transmission path for the LAN data to either a fixed band side or a shared band side according to the traffic of LAN data monitored by the traffic monitor." However, Applicant respectfully disagrees that such a feature is remedied, as the Examiner contends, by Beshai.

In support of his conclusion that Beshai provides for the "path selector" element of claim 1 and 17, the the Examiner cites column 9, lines 52-29 of Beshai. Column 9, lines 52-29 is recited below:

"Any leftover capacity is used for connectionless-type traffic. The arrows in FIG. 10b indicate that *packets belonging to connections of any traffic class may exploit the unused time slots allocated by the rate controller to any path*. The reverse is not allowed; packets belonging to a path may not be transmitted during unused time slots allocated by the rate controller to any connection class." (emphasis added)

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Applicants respectfully contend that the above citation merely suggests that packets are able to "exploit the unused time slots." Applicants are unsure how the Examiner is interpreting this statement regarding packets exploiting unused time slots to equate to Applicant's feature of a path selector performing. Conspicuously absent in the citation or the entire Beshai reference is any explicit or implicit mention of "switching" between a fixed band side or a shared band side according to the traffic of LAN data. Absent such a showing, Applicant respectfully contends that the combination of Hayward and Beshai does not provide for each and every element of Applicant's independent claims 1 and 17.

Based on the arguments presented above and further in view of the interview of 01/05/2006, Applicant respectfully requests the Examiner to withdraw the rejection with respect to independent claims 1 and 17 and, hereby, respectfully requests allowance thereof.

Further, the above-mentioned arguments with respect to independent claims 1 and 17 substantially apply to dependent claims 8-14 and 16 as they inherit all the limitations of the claim from which they depend from. Applicant respectfully requests the Examiner to withdraw the rejections with respect to dependent claims 8-14 and 16 and, hereby, respectfully requests allowance thereof.

Claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai) as applied to claims 1, 8-14, and 16-17 above, and further in view of U.S. 5,809,012 (Takase). Claims 5-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,622,848 (Hayward) in view of U.S. 6,404,735 (Beshai) as applied

to claims 1, 8-14, and 16-17 above, and further in view of U.S. 5,337,313 (Buchholz). The above-mentioned arguments substantially apply to dependent claims 2 and 5-7 as they inherit all the claim from which they depend.

Takase merely provides for a communication system for use with a network for transmitting fixed-length cells from a transmitting terminal via a virtual connection in the network to a receiving terminal.

Buchholz merely provides for the preservation of sequential relationship of a plurality of data packets (generated by separate source devices) in a data transmission system by ordering the packets as a data stream.

Applicant respectfully submits that both the Takase and Buchholz references fail to remedy the above-mentioned shortcomings of the combination of Hayward and Beshai references.

Hence, the combination of Hayward, Beshai, and Takase fail to teach each and every limitation of claims 2 and 5-7. Applicant, therefore, respectfully requests the Examiner to withdraw the rejection with respect to claims 2 and 5-7 and, hereby, respectfully requests allowance thereof.

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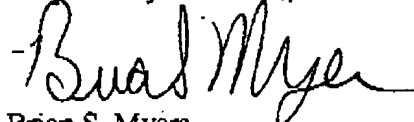
SUMMARY

As has been detailed above, none of the references, cited or applied, provide for the specific claimed details of applicant's presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

This response/amendment is being filed with a request for extension of time. The Commissioner is hereby authorized to charge the extension fee, as well as any deficiencies in the fees provided to Deposit Account No. 50-1290.

If it is felt that an interview would expedite prosecution of this application, please do not hesitate to contact applicants' representative at the below number.

Respectfully submitted,



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